



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,286	09/12/2001	Francois Cunchon	T21497-907461	3967
181 7590 07/18/2007 MILES & STOCKBRIDGE PC 1751 PINNACLE DRIVE SUITE 500 MCLEAN, VA 22102-3833			EXAMINER BATES, KEVIN T	
			ART UNIT 2155	PAPER NUMBER
			MAIL DATE 07/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/936,286

Applicant(s)

CUNCHON ET AL.

Examiner

Kevin Bates

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7,8,10-12,14,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-8, 10-12, 14, 16, and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Amendment***

This Office Action is in response to a communication made on June 27, 2007.

Claims 7-8, 12, 14, and 16 have been amended.

Claims 1-6, 9, 13, and 15 have been cancelled.

Claim 17 has been newly added.

Claims 7-8, 10-12, 14, 16, and 17 are pending in this application.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 7 and 14 include the limitations of "defining a third port of a server application for receiving at least one message with a second security level" and "deleting any message sent to the third port regardless of a security level." These two limitation seem to conflict, it is unclear how a port can receive a message of a second security level, while also be deleting any message sent to the same port regardless of security level.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 7-8, 10-12, 14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feigen in view of in view of Coile (6473406), and in further view of Winiger (5845068).**

Regarding claim 7, Feigen teaches a method for allowing a client application to establish, in a client network, a first connection having a first security level with a first port of a server application hosted in a server machine linked to a server network, in order to send messages addressed to the server machine, said messages passing from the client network to the server network through a network layer of a gateway machine (Figure 3, security server is the gateway), the method comprising:

creating a second port in the gateway machine;

rerouting to the second port of the gateway machine, by ordering the network layer of the gateway any message sent and addressed to the first port of the server machine (Column 4, lines 4 – 11);

listening to the second port to detect a request to establish said first connection (Column 4, lines 12 – 19) and;

generating, in the gateway machine, a thread which establishes said first connection (Column 4, lines 22 – 31).

Feigen does not explicitly indicate that any addressed message to the first port is received at the second port, and creating based on the message a connection with the

first port of the server application or defining a third port of the server application for receiving at least one of the messages with a second security level; and deleting, by ordering the network layer (CR) of the gateway machine, any message sent to the third port regardless of a security level of said message sent to the third port.

Coile teaches a system of providing transparent message security and filtering which includes any addressed message to the first port is received at the second port, and creating based on the message a connection with the first port of the server application (Column 8, lines 49 – 67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Coile's teaching of transparency in Feigen so that the client never has to act according to any packet filtering and separate security issues, and only operate as if using the first server.

Winiger teaches defining a third port of the server application for receiving at least one of the messages with a second security level (Column 4, line 67 – Column 5, line 4) deleting by ordering the network layer of the gateway machine any message sent to the third port (Column 6, lines 6 – 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Winiger's teaching of multiple security classification levels in Feigen's system in order to allow a certain resources to be accessed by only certain clearance levels, which increases security and blocks invalid attempts at resources which clearance has not been granted.

**Regarding claims 10 and 11**, Feigen teaches a method according to claims 7 and 8, wherein said creating and rerouting are executed automatically by a first process of the gateway machine and said first process generates a second process that executes said listening and generating (Column 4, lines 12 – 31).

**Regarding claim 14**, Feigen teaches a method for allowing a client application to establish in a client network a first connection having a first security level, directly with a first port of a server application hosted in a server machine linked to a server network, in order to send messages addressed to the server machine, said messages passing from the client network to the server network through a network layer of a gateway machine (Figure 3, security server is the gateway), the method comprising:

generating, in the gateway machine, a thread which establishes said first connection; and

activating, in the gateway machine, a secure application proxy that reroutes the messages from the first connection, in a way that is transparent to the client application (Column 4, lines 4 – 11), so as to establish a second connection having a second security level with the server application, said second connection being unknown to said client application (Column 4, lines 22 – 31),

wherein said generating is performed in response to the detection of the request addressed to the first port of the server application to establish said first connection.

Feigen does not explicitly indicate that any addressed message to the first port is received at the second port, and creating based on the message a connection with the first port of the server application or defining a third port of the server application for

receiving at least one of the messages with a second security level; and deleting, by ordering the network layer (CR) of the gateway machine, any message sent to the third port regardless of a security level of said message sent to the third port.

Coile teaches a system of providing transparent message security and filtering which includes any addressed message to the first port is received at the second port, and creating based on the message a connection with the first port of the server application (Column 8, lines 49 – 67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Coile's teaching of transparency in Feigen so that the client never has to act according to any packet filtering and separate security issues, and only operate as if using the first server.

Winiger teaches defining a third port of the server application for receiving at least one of the messages with a second security level (Column 4, line 67 – Column 5, line 4) deleting by ordering the network layer of the gateway machine any message sent to the third port (Column 6, lines 6 – 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Winiger's teaching of multiple security classification levels in Feigen's system in order to allow a certain resources to be accessed by only certain clearance levels, which increases security and blocks invalid attempts at resources which clearance has not been granted.

**Regarding claim 8,** Feigen teaches a method according to claim 7.

Feigen does not explicitly indicate said thread comprises:

establishes said first connection in a first phase with the first security level in a first interface associated with the second port and with said request;

establishes in a second phase a second connection with the second level of security in a second interface to the third port in the server machine;

writes with the second security level in the second interface any message read in the first interface with the first security level in a third phase, and

writes with the first security level in the first interface any message read in the second interlace with the second security level in a fourth phase.

Winiger teaches whereas said thread comprises:

establishes said first connection in a first phase with a first security level in a first interface associated with the second port and with said request;

establishes in a second phase a second connection with a second level of security in a second interface to the third port in the server machine (Column 4, line 67 – Column 5, line 6, where the system allows a new connection to open and request a socket of the server application, if the socket is open it allows a new connection to be made at a specified security level, which can be different then a previously opened socket or port which is operating at a completely separate security layer or label);

writes with the second security level in the second interface any message read in the first interface with the first security level in a third phase, and;

writes with the first security level in the first interface any message read in the second interlace with the second security level in a fourth phase (Column 5, lines 10 – 14; Column 4, lines 44 – 51 where when the system opens a socket at a certain security



level it responses with the response that contains the identification of the security level in the response header).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Winiger's teaching of multiple security classification levels in Feigen's system in order to allow a certain resources to be accessed by only certain clearance levels, which increases security and flexibility.

**Regarding claim 12**, Feigen teaches a method according to claim 9, further comprising automatically executing the steps of creating, rerouting and deleting by a first process of the gateway machine and generating by said first process a second process that executes the steps of listening and generating a thread (Column 4, lines 12 – 31).

**Regarding claim 16**, Feigen teaches a method according to claim 14, further comprising: automatically executing said creating and rerouting, by a first process of the gateway machine, and generating, by said first process, a second process that executing said listening and generating (Column 4, lines 12 – 31).

**Regarding claim 17**, Feigen teaches a method according to claim 16, further comprising: automatically executing said deleting by said first process of the gateway machine (Column 4, lines 12 – 31).

### ***Response to Arguments***

Applicant's arguments filed June 27, 2007 have been fully considered but they are not persuasive. The applicant argues that the reference, Winiger, does not teach

Art Unit: 2155

deleting every message sent to port 3 regardless of the security level. The examiner disagrees, since it is show in the 112 rejection to the independent claims, it is unclear how the port can be open to receive messages of a second security level, while also deleting any message sent to that port regardless of any security level, the examiner must his best interpretation of the claim in attempt at a proper rejection. It would make most sense to the examiner if the port is opened for a particular security level, it should sent those messages that are to be received at the port, while all other security levels are deleted. Winiger shows this functionality in Column 4, line 67 – Column 5, line 4; Column 6, lines 6 – 9.

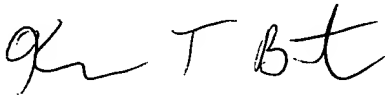
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2155

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'KB', with a stylized flourish extending to the right.

KB

July 16, 2007